REMARKS

Claims 1, 3-11 and 13-19 are pending in this application of which claims 1, 3, 5, 10, 11, 13 and 15 are independent. Claims 1, 5, 6, 9-11, 15, 16 and 19 stand allowed. It is acknowledged with appreciation the allowance of claim 10, further to the Request for Reconsideration filed on May 12, 2004. Claims 3, 4, 7, 8, 13, 14, 17 and 18 remain at issue.

The Examiner rejects claims 3, 4, 7, 8, 13, 14, 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Blank (previously cited) in view of Yasumoto (U.S. Patent No. 6,747,642). This rejection is respectfully traversed.

The Examiner admits that Blank does not disclose a transmittance setting unit that uses a monotone increasing function of the depth coordinate value to calculate the transmittance of the relevant object, but otherwise maintains the same position as in the previous Office Action. (See page 3, sections 4-5 of the Office Action). Applicants maintain the same position with regard to Blank and refer the Examiner to Applicants' positions set forth in previous responses.

The Examiner posits that Blank in combination with Yasumoto teaches the elements of claims 3 and 13 – specifically "wherein said transmittance setting unit uses a monotone increasing function of the depth coordinate value of the object to calculate the transmittance of the relevant object," as claim 3 recites and "wherein said step of setting the transmittance of the object includes the step of calculating the transmittance of the object using a monotone increasing function of the depth coordinate value of the relevant object," as claim 13 recites. Applicants respectfully disagree.

Referring to col. 2:22-27 of Yasumoto, the Examiner posits that Yasumoto discloses a monotone increasing function by using "the distance in depth between pixels (x) and a further value that is a function of pixel depth to provide an alpha value that is modulated by the pixel's depth

value (*f(x)*)." To the contrary, Yasumoto, and especially the text cited by the Examiner, fails to teach a *monotone* increasing function as claims 3 and 13 recite. Specifically, col. 2:22-27 of Yasumoto recites,

> Another example incorporates depth modulation. In this example, a pixel Alpha value is calculated based on both the distance value and a further value that is a function of pixel depth to provide an Alpha value that is modulated by the pixel's depth value. The border is then blended into the pixel color based on the depth-modulated Alpha value.

At col. 10:66 – col. 11:11, Yasumoto further provides that Alpha may be determined by "a function (e.g., product) of the value calculated in block 208 [See Fig. 4, AlphaDz] and a further value that is a function of the pixel depth z [AlphaZ]...," and that the "resulting Alpha value, which is used to control blending...depends also on the depth of the pixel." In other words, Alpha = AlphaDz*AlphaZ, whereby AlphaZ takes into account the depth of the pixel.

Referring to the above example, the Examiner states that "Yasumoto uses the distance in depth between pixels (*x*) and further a value that is a function of pixel depth to provide an alpha value that is modulated by the pixel's depth value (*f(x)*)." (See Office Action, paragraph spanning pages 3 and 4). For clarification, Dz represents a distance between neighboring pixels at a certain depth, and AlphaDz is a scaling/correction factor to clamp the alpha value. (See Fig. 4). In other words, AlphaDz is a scaling/correction value that factors lateral distance between pixels at a certain depth. AlphaDz is not a *monotone* increasing function of the depth coordinate value of the object to calculate the transmittance of the relevant object, as claims 3 and 13 recite. Rather, it is a function of the x coordinate value.

Also, Yasumoto fails to disclose how AlphaZ is determined or even the parameters of the function incorporating the depth of the pixel. Without any support, it is improper, as the Examiner has done, to assume that AlphaZ represents a *monotone* increasing function of the depth coordinate value of the object to calculate the transmittance of the relevant object, as claims 3 and 13 recite.

Even further, the expression Alpha = AlphaDz*AlphaZ is not a *monotone* increasing function. AlphaDz is determined from a function of lateral distance between pixels. AlphaZ is a function of the depth value. The product of these two functions (Alpha) does not *monotonically* increase or decrease with the Z value, as would be the case of a monotone increasing function as claims 3 and 13 recite.

The combination of Blank and Yasumoto fails to disclose each and every element of at least independent claims 3 and 13. Also, the motivation provided by the Examiner ("to allow for more gradual transition...") does not address the absence of a monotone increasing function as recited by the claims, and why one would be motivated to use a monotone increasing function. The Examiner has failed to establish a *prima facie* case of obviousness. Claims dependent therefrom are patentable at least based on dependency to either claim 3 or 13. Withdrawal of the obviousness rejection is respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT WILL & EMERY LLP

David M. Tennant
Registration No. 48,362

600 13th Street, N.W.
Washington, DC 20005-3096
202.756.8000 DT:dlb
Facsimile: 202.756.8087
Date: November 1, 2004